13 GLOSSARY

Acre-foot: The volume of water that covers 1 acre (43,560 feet) to a depth of 1 foot (0.30 meters).

Administrative Procedure Act: The Administrative Procedure Act of 1947 requires agencies to keep the public currently informed of their organization, procedures, and rules; provide for public participation in the rule-making process; prescribe uniform standards for the conduct of formal rule making and proceedings that are required by statute to be made on the record after opportunity for an agency hearing (i.e., adjudicatory proceedings); and restate the law of judicial review. The act applies (with certain exceptions) to every agency and authority of the government.

Advisory Council on Historic Preservation: A body appointed to advise the President and Congress in the coordination of actions by Federal agencies on matters relating to historic preservation. This organization participates in National Historic Preservation Act (NHPA) Section 106 consultations that are controversial or precedent setting.

Affected environment: Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action.

Air pollutant: An airborne substance that could, in high enough concentrations, harm living things or cause damage to materials. From a regulatory perspective, an air pollutant is a substance for which emissions or atmospheric concentrations are regulated or for which maximum guideline levels have been established due to potential harmful effects on human health and welfare.

Air quality standards: The level of pollutants prescribed by regulation that may not be exceeded during a specified time in a defined area.

Air shed: An area where emitted pollutants may interact or increase in concentration. The delineation of an air shed may be influenced by topographic features such as a land-water interface.

Alluvial deposits: Earth, sand, gravel, and other materials carried and deposited by moving surface water.

Alluvial fan: A gently sloping mass of unconsolidated material (e.g., clay, silt, sand, or gravel) deposited where a stream leaves a narrow canyon and enters a valley floor. Viewed from above, it has the shape of an open fan. An alluvial fan can be thought of as the land counterpart of a delta.

Ambient air: Any unconfined portion of the atmosphere; open air, surrounding air. That portion of the atmosphere, external to buildings, to which the general public has access.

American Indian Religious Freedom Act of 1978: This act requires federal agencies to consult with Tribal officials to ensure protection of traditional religious and cultural rights and practices.

Ammonia (NH_3) slip: Unreacted ammonia that escapes out to the atmosphere.

Aquifer: A permeable underground formation that yields usable amounts of water to a well or spring. The formation could be sand, gravel, limestone, and/or sandstone.

Aquitard: A geological formation that is not capable of transmitting significant quantities of water. It may function as a confining bed.

Archaeological sites (resources): Any location where humans have altered the terrain or discarded artifacts during either prehistoric or historic times.

Archaeology: A scientific approach to the study of human ecology, cultural history, and cultural process.

Area of Critical Environmental Concern (ACEC): An area managed by the Bureau of Land Management (BLM) and defined by the Federal Land Policy and Management Act of 1976 as having significant historical, cultural, and scenic values; habitat for fish and wildlife; and other public land resources, as identified through the BLM's land use planning process.

Artifact: An object produced or shaped by human workmanship of archaeological or historical interest.

Arroyo: A steep-sided and flat-bottomed gulley in an arid region that is occupied by a stream only intermittently, after rains.

Attainment area: An area that the U.S. Environmental Protection Agency (EPA) has designated as being in compliance with one or more of the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. Any area may be in attainment for some pollutants but not for others.

Benthic: Living on the sea floor.

Biochemical oxygen demand (BOD/BOD_5): An indirect measure of the concentration of biologically degradable material present in organic wastes. It usually reflects the amount of oxygen consumed in five days (BOD_5) by biological processes breaking down organic waste.

Blowdown: Water that must be removed from the cooling system on a regular basis in order to maintain chemical conditions and efficient operations.

Brackish water: Water that is saltier than freshwater but not as salty as seawater. It may result from mixing of seawater with freshwater, as in estuaries, or it may occur naturally.

Bureau of Land Management (BLM): An agency of the U.S. Department of the Interior that is responsible for managing public lands.

Candidate species: Plants and animals for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information on biological vulnerability and threats to justify proposing to add them to the threatened and endangered species list, but cannot do so immediately because other species have a higher priority for listing.

Capacity: The load for which a generator, turbine, transformer, transmission circuit, apparatus, station, or system is rated. Capacity is also used synonymously with capability.

Carbon monoxide (CO): A colorless, odorless gas that is toxic if breathed in high concentrations over a period of time. It is formed as the product of the incomplete combustion of hydrocarbons (fuel).

Chemical oxygen demand (COD): COD is the amount of oxygen needed to degrade the organic compounds in a water system; it is typically determined by a standardized test procedure. The higher the COD, the poorer the water quality.

Class I, II, and III Areas: Area classifications, defined by the Clean Air Act (CAA), for which there are established limits to the annual amount of air pollution increase. Class I areas include international parks and certain national parks and wilderness areas; allowable increases in air pollution are very limited. Air pollution increases in Class II areas are less limited and are least limited in Class III areas. Areas not designated as Class I start out as Class II and may be reclassified up or down by the state, subject to Federal requirements. Specified Federal lands, including certain national parks and wilderness areas, are mandatory Class I areas and may not be redesignated to another classification. All other PSD (prevention of significant deterioration) areas of the country are designated Class II areas. Currently there are no Class III areas.

Clean Air Act (CAA): (42 USC 7401 et seq.) Establishes (1) national air quality criteria and control techniques (Section 7408); (2) national ambient air quality standards (Section 7409 defines the highest allowable levels of certain pollutants in the ambient air. Because the EPA must establish the criteria for setting these standards, the regulated pollutants are called criteria pollutants; (3) state implementation plan (SIP) requirements (Section 4710); (4) Federal performance standards for stationary sources (Section 4711); (5) national emission standards for hazardous air pollutants (Section 7412); (6) applicability of CAA to Federal facilities (Section 7418) (Federal agency must comply with Federal, State, and local requirements respecting control and abatement of air pollution, including permit and other procedural requirements, to the same extent as any person); (7) Federal new motor vehicle emission standards (Section 7521); (8) regulations for fuel (Section 7545); (9) aircraft emission standards (Section 7571).

Clean Air Act Conformity Requirement: Section 176 (c) of the Clean Air Act (CAA) requires Federal agencies to ensure that their actions conform to applicable implementation plans (in most cases, the SIP) for achieving and maintaining the NAAQS for criteria pollutants.

Clean Water Act (CWA): (33 U.S. Code 1251 et seq.) Establishes requirements for (1) technology-based effluent limitations (Section 301); (2) water quality-based effluent limitations (Section 302); (3) individual control strategies for toxic pollutants (Section 304[l]); (4) new source performance standards (Section 306); (5) regulation of toxics (Section 307); (6) Federal facilities' pollution control (provisions for presidential exception) (Section 313); (7) thermal discharges (Section 316); (8) permits under the National Pollutant Discharge Elimination System (NPDES) (Section 402); (9) permits for the discharge or dredged or fill materials into navigable waters (Section 404).

Code of Federal Regulations (CFR): All Federal regulations in force are published in codified form in the *Code of Federal Regulations*.

Community (biotic): All plants and animals occupying a specific area under relatively similar conditions.

Conductor: Transmission line wire strung between transmission line structures to transmit electricity from one location to another.

Corona effect: Electrical breakdown of air into charged particles. It is caused by the electric field at the surface of conductors.

Council on Environmental Quality (CEQ): Established by the National Environmental Policy Act (NEPA). CEQ regulations (40 CFR Parts 1500–1508) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements (EISs), and the timing and extent of public participation.

Criteria pollutant: An air pollutant that is regulated by the NAAQS. The EPA must describe the characteristics and potential health and welfare effects that form the basis for setting or revising the standard for each regulated pollutant. Criteria pollutants are sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter.

Critical habitat: Habitat essential to the conservation of an endangered or threatened species that has been designated as critical by the USFWS following the procedures outlined in the Endangered Species Act and its implementing regulations (50 CFR 424). See endangered species and threatened species.

Cultural resources: Archaeological sites, architectural structures or features, traditional use areas, and Native American sacred sites or special use areas that provide evidence of the prehistory and history of a community.

Cumulative impact: The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.17).

Current: Flow of electrical charge.

Decibel (dB): A unit for expressing the relative intensity of sounds on a logarithmic scale from zero for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans. For traffic and industrial noise measurements, the A-weighted decibel (dBA), a frequency-weighted noise unit, is widely used. The A-weighted decibel scale corresponds approximately to the frequency response of the human ear and thus correlates well with loudness.

Dewater: Remove or drain water from an area.

Direct impacts: Impacts that are caused by the action and occur at the same time and place.

Distance zones: The relative visibility from travel routes or observation points.

Double-circuit: Two sets of lines (circuits) on a single tower (a single circuit consists of three conductors).

Ecology: A branch of science dealing with the interrelationships of living organisms with one another and with their nonliving environment.

Ecosystem: A community of organisms and their physical environment interacting as an ecological unit.

Effects: As used in NEPA documentation, the terms effects and impacts are synonymous. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health; effects can be direct, indirect, or cumulative. Effects include both beneficial and detrimental impacts.

Effluent: A waste stream flowing into the atmosphere, surface water, groundwater, or soil. Most frequently the term applies to wastes discharged to surface waters.

Elevation: Height above sea level.

Eligible cultural resource: A cultural resource that has been evaluated and reviewed by an agency and the State Historic Preservation Office (SHPO) and recommended as eligible for inclusion in the National Register of Historic Places (NRHP), based on the criteria of significance. The criteria of significance consider American history, architecture, archeology, engineering, and culture. The criteria require integrity and association with lives or events, distinctiveness for any of a variety of reasons, or importance because of information the property does or could hold.

Emissions: Pollution discharged into the atmosphere from smoke stacks, other vents, and surface areas of commercial or industrial facilities, residential chimneys, and vehicle exhausts.

Emission standards: Requirements established by a State, local government, or the EPA Administrator that limit the quantity, rate, or concentration of emissions of air pollutants on a continuous basis.

Endangered species: Plants or animals that are in danger of extinction throughout all or a significant portion of their ranges and that have been listed as endangered by the USFWS or the National Marine Fisheries Service following the procedures outlined in the Endangered Species Act (ESA) and its implementing regulations (50 CFR Part 424). Some states also list species as endangered.

Endangered Species Act (ESA): (16 U.S. Code 1531 et seq.) Provides for listing and protection of animal and plant species identified as in danger, or likely to be in danger, of extinction throughout all or a significant portion of their range. Section 7 places strict requirements on Federal agencies to protect listed species.

Environmental impact statement (EIS): The detailed written statement that is required by Section 102(2)(C) of NEPA for a proposed major Federal action significantly affecting the quality of the human environment. A U.S. Department of Energy (DOE) EIS is prepared in accordance with applicable requirements of the CEQ NEPA regulations in 40 CFR Parts 1500−1508 and DOE NEPA regulations in 10 CFR Part 1021. The statement includes, among other information, discussions of the environmental impacts of the proposed action and all reasonable alternatives, adverse environmental effects that cannot be avoided should the proposal be implemented, the relationship between short-term uses of the human environment and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources.

Environmental justice: An identification of potential disproportionately high and adverse impacts on low-income and/or minority populations that may result from proposed Federal actions (required by Executive Order 12898).

Energy: That which does or is capable of doing work. It is measured in terms of the work it is capable of doing; electric energy is usually measured in kilowatt-hours.

Ephemeral lake: A lake that becomes dry during the dry season or in particularly dry years.

Ephemeral stream: A stream that flows only after a period of heavy precipitation.

Epilimnion: Upper waters of a thermally stratified lake, subject to wind action.

Erosion: Wearing away of soil and rock by weathering and the actions of surface water, wind, and underground water.

Eutrophication: The process by which water bodies, such as lakes, estuaries, or slow-moving rivers and streams are enriched by nutrients (usually phosphorus and nitrogen), which leads to excessive plant growth. This plant growth (often called algae bloom) reduces dissolved oxygen (DO) in the water and can lead to fish deaths.

Fault: A fracture or a zone of fractures within a rock formation along which vertical, horizontal, or transverse slippage has occurred.

Fauna: Animals, especially those of a specific region, considered as a group.

Federal Land Policy and Management Act: Requires the Secretary of the Interior to issue regulations to manage public lands and the property located thereon for the long term.

Federal Power Act: This act, as amended in 1935, created the Federal Power Commission and granted it the power to regulate the interstate electricity market as well as utility mergers and the licensing of hydropower projects. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Field effect: Induced currents and voltages as well as related effects that might occur as a result of electric and magnetic fields at ground level.

Floodplain: The lowlands adjoining inland and coastal waters and relatively flat areas, including at a minimum that area inundated by a 1% or greater chance flood in any given year. The base floodplain is defined as the 100-year (1%) floodplain. The critical action floodplain is defined as the 500-year (0.2%) floodplain.

Flow: The volume of water passing a given point per unit of time. Same as streamflow.

Formation: In geology, the primary unit of formal stratigraphic mapping or description. Most formations possess certain distinctive features.

Fugitive dust: The dust released from activities associated with construction, manufacturing, or transportation.

Generation: The act or process of producing electricity from other forms of energy.

Generator: A machine that converts mechanical energy into electrical energy.

Geology: The science that deals with the study of the materials, processes, environments, and history of the Earth, including the rocks and their formation and structure.

Geothermal: Of or connected with the heat inside the Earth.

Groundwater: Water within the earth that supplies wells and springs.

Groundwater basin: Subsurface structure having the character of a basin with respect to collection, retention, and outflow of water.

Hazardous air pollutants (HAPs): Air pollutants that are not covered by ambient air quality standards, but that may present a threat of adverse human health effects or adverse environmental effects. They are regulated under Section 112 of the CAA.

Hazardous waste: A category of waste regulated under Resource Conservation and Recovery Act (RCRA). To be considered hazardous, a waste must be a solid waste under RCRA and must exhibit at least one of four characteristics described in 40 CFR 261.20 through 261.24 (i.e., ignitability, corrosivity, reactivity, or toxicity) or be specifically listed by the EPA in 40 CFR 261.31 through 261.33.

Heavy metals: Metallic elements with high atomic weights (e.g., mercury, arsenic, and lead). They can damage living things at low concentrations and tend to accumulate in the food chain.

Historic properties: Under the NHPA, these are properties of national, State, or local significance in American history, architecture, archaeology, engineering, or culture that are worthy of preservation.

Hypolimnion: The bottom waters of a thermally stratified lake. It is isolated from wind mixing and typically too dark for much plant photosynthesis to occur

Impacts (effects): In this EIS, as well as in the CEQ regulations, the word impact is used synonymously with the word effect. See effects.

Indirect impacts: Effects that are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Interested parties: Those groups or individuals that are interested, for whatever reason, in the project and its progress. Interested parties include, but are not limited to, private individuals, public agencies, organizations, customers, and potential customers.

Invasive species: An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health. “Alien species” means, with respect to a particular ecosystem, any species, including its seed, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

Invertebrate: Animals characterized by not having a backbone or spinal column, including a wide variety of organisms such as insects, spiders, worms, clams, and crayfish.

Isopleth: A line on a map joining points of equal value.

Kilovolt (kV): The electrical unit of power that equals 1,000 volts.

Landscape: An area composed of interacting ecosystems that are repeated because of geology, land, soils, climate, biota, and human influences throughout the area. Landscapes are generally of a size, shape, and pattern that are determined by interacting ecosystems.

Lithic: A stone artifact that has been modified or altered by human hands.

Loam: A rich, permeable soil composed of a mixture of clay, silt, sand, and organic matter.

Low-income population: A population that is classified by the U.S. Bureau of the Census 2000 as having an aggregated mean 1999 income level for a family less than $17,463. This level is adjusted through the poverty index using a standard of living percentage change where applicable.

Magnitude (of an earthquake): A quantity characteristic of the total energy released by an earthquake, as contrasted to "intensity," which describes its effects at a particular place. Magnitude is calculated using common logarithms (base 10) of the largest ground motion. A one-unit increase in magnitude (e.g., from magnitude 6 to magnitude 7) represents a 30-fold increase in the amount of energy released. Three common types of magnitude are Richter (or local) (ML), P body wave (mb), and surface wave (Ms).

Maintenance area: Area redesignated as attainment within the last 10 years under the CAA. See attainment area.

Major source: Any stationary source or group of stationary sources in which all of the pollutant-emitting activities emit, or have the potential to emit, 100 or more tons per year of any regulated air pollutant, 10 tons per year of a single HAP, or combined HAP emissions exceeding 25 tons per year.

Makeup water: Water added to a cooling tower to replace water lost to evaporation or blowdown.

Mammal: Animals in the class *Mammalia* that are distinguished by having self-regulating body temperature, hair, and in females, milk-producing mammary glands to feed their young.

Maquiladora: A Mexican corporation that operates under a maquila (Mexican In-Bond) program approved by the Mexican Secretariate of Commerce and Industry Development.

Maximum contaminant level (MCL): The highest level of a contaminant that the EPA allows in drinking water.

Megawatt (MW): The electrical unit of power that equals 1 million watts or 1,000 kilowatts.

Mesa: An isolated relatively flat-topped natural elevation.

Meteorology: The science dealing with the dynamics of the atmosphere and its phenomena, especially relating to weather.

Migratory Bird Treaty Act: This act requires that the USFWS be consulted to determine the effects of a proposed activity on migratory birds and requires that opportunities to minimize the effects be considered.

Mineral: Naturally occurring inorganic element or compound.

Minority Population: Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic are minorities. The CEQ identifies these groups as minority populations when either (1) the minority population of the affected area exceeds 50%, or (2) the minority population percentage in the affected area is meaningfully greater than the minority population percentage in the general population or appropriate unit of geographical analysis.

Mitigation: The alleviation of adverse impacts on environmental resources by avoidance through project redesign or project relocation, by protection, or by adequate scientific study. Mitigation includes (1) avoiding an impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of an action and its implementation; (3) rectifying an impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of an action; or (5) compensating for an impact by replacing or providing substitute resources or environments.

Mudflat: A flat sheet of mud between the high and low tide marks. Also, the flat bottoms of lakes, rivers, and ponds, largely filled with organic deposits, freshly exposed by a lowering of the water level.

National Ambient Air Quality Standards (NAAQS): Standards defining the highest allowable levels of certain pollutants in the ambient air. Because the EPA must establish the criteria for setting these standards, the regulated pollutants are called criteria pollutants. The criteria pollutants are sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. See Clean Air Act.

National Environmental Policy Act (NEPA): (42 USC 4341, passed by Congress in 1969) NEPA established a national policy designed to encourage consideration of the influences of human activities (e.g., population growth, high-density urbanization, industrial development) on the natural environment. NEPA also established the CEQ. NEPA procedures require that environmental information be made available to the public before decisions are made. Information contained in NEPA documents must focus on the relevant issues in order to facilitate the decision-making process.

National Historic Preservation Act (NHPA): (16 USC 470) Provides for an expanded NRHP to register districts, sites, buildings, structures, and objects significant to American history, architecture, archaeology, and culture. Section 106 requires that the President's Advisory Council on Historic Preservation be afforded an opportunity to comment on any undertaking that adversely affects properties listed in the NRHP.

National Pollutant Discharge Elimination System (NPDES) Permit: Federal regulation (40 CFR Parts 122 and 125) that requires permits for the discharge of pollutants from any point source into the waters of the United States regulated through the CWA.

National Register of Historic Places (NRHP): A list maintained by the Secretary of the Interior of districts, sites, buildings, structures, and objects of prehistoric or historic local, state, or national significance. The list is expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a)(1)(A) of the NHPA.

Native American: Person culturally identified with a Tribe that is indigenous to the United States and who belongs to a Federally recognized Tribe.

Native American Graves Protection and Repatriation Act: This act provides requirements for the treatment, repatriation, determination of ownership, and control of human remains and cultural items on Federal or Tribal lands.

Nitrogen oxides (NO_x): Also more correctly known as "oxides of nitrogen." Nitrogen oxides NO_X include the stable oxides of nitrous oxide N_2O, nitrogen dioxide (NO_2) and nitric oxide (NO). Typically NO_x is used to represent NO + NO_2. NO forms when fossil fuels are burned at high temperatures and rapidly undergo further oxidation to NO_2. NO_x reacts with volatile organic compounds (VOC) to form ozone, the main component of urban smog. NO_x also contributes to the formation of acid rain as nitric acid. NO_2 is one of the six criteria air pollutants specified under Title I of the CAA.

Noise: Unwanted or undesirable sound, usually characterized as being so loud as to interfere with, or be inappropriate to, normal activities such as communication, sleep, or study.

Nonattainment area: An area that the EPA has designated as not meeting one or more of the NAAQS for criteria pollutants. An area may be in attainment for some pollutants but not others.

Offsets: The concept whereby emissions from a proposed facility that may be a new source of air pollution are balanced by reductions from existing sources to stabilize total emissions in a particular area.

Oxidation lagoon: A shallow pond where sunlight, algae, and oxygen interact to purify wastewater.

Ozone (O_3): The triatomic form of oxygen. In the upper atmosphere, O_3protects the earth from the sun's ultraviolet rays, but in the lower levels of the atmosphere, O_3 is considered an air pollutant. In the lower atmosphere, O_3 is formed primarily from a photochemical reaction between nitrogen oxides and volatile organic compounds. Small amounts of O_3 can be formed from corona effects on transmission lines.

Particulate Matter: Any finely divided solid or liquid material, other than uncombined pure water.

Peak capacity: The maximum capacity of a system to meet loads.

Peak demand: The highest demand for power during a stated period of time.

Peaker: A power plant that is generally run only when there is a high demand, that is, peak demand, for electricity.

Perched water table: A water table that is positioned above the normal water table for an area because of the presence of an impermeable rock layer.

Permeability: The ability of rock or soil to transmit a fluid.

pH: A measure of the relative acidity or alkalinity of a solution, expressed on a scale from 0 to 14, with the neutral point at 7.0. Acid solutions have pH values lower than 7.0, and basic (i.e., alkaline) solutions have pH values higher than 7.0. Because pH is the negative logarithm of the hydrogen ion (H+) concentration, each unit increase in pH value expresses a change of state of 10 times the preceding state. Thus, pH 5 is 10 times more acidic than pH 6, and pH 9 is 10 times more alkaline than pH 8. The abbreviation "pH" stands for poten2 (German power) of hydrogen.

Phosphates: Chemical compounds that contain phosphorous. (See Section 3.2.1.1.2, Water Quality, for more information.)

Phreatophytic plants: Deep-rooted plants that obtain their water supply from groundwater

Physiography: The physical geography of an area or the description of its physical features.

$PM_{2.5}$: Airborne particulate matter with a mean aerodynamic diameter less than or equal to 2.5 μm; regulated under the NAAQS.

PM_{10}: Airborne particulate matter with a mean aerodynamic diameter less than or equal to 10 μm; regulated under the NAAQS.

Potable water: Water that can be used for human consumption.

Prehistoric: Of, relating to, or existing in times antedating written history. Prehistoric cultural resources are those that antedate written records of the human cultures that produced them.

Prevention of Significant Deterioration (of air quality) (PSD): Regulations established to prevent significant deterioration of air quality in areas that already meet the NAAQS. Among other provisions, cumulative increases in sulfur dioxide, nitrogen dioxide, and PM_{10} levels after specified baseline dates; must not exceed specified maximum allowable amounts.

Prime farmland: Soil types with a combination of characteristics that make them particularly productive for agriculture.

Quaternary: A subdivision of geological time (the Quaternary period), including roughly the last two million years up to the present.

Rain shadow: The region on the lee side of a mountain or similar barrier where the precipitation is less than on the windward side.

Raptor: Birds of prey, including various types of hawks, falcons, eagles, vultures, and owls.

Record of Decision (ROD): A concise public document that records a Federal agency's decision concerning a proposed action for which the agency has prepared EIS. The ROD is prepared in accordance with the requirements of the CEQ NEPA regulations (40 CFR 1505.2). A ROD identifies the alternatives considered in reaching the decision, the environmentally preferable alternatives, factors balanced by the agency in making the decision, whether all practicable means to avoid or minimize environmental harm have been adopted, and if not, why they were not.

Recharge (of groundwater): The addition of water to an aquifer by natural infiltration (e.g., rainfall that seeps into the ground) or by artificial injection through wells.

Region of influence (ROI): The geographical region that would be expected to affect a specific resource in some way by the proposed action and/or alternative(s).

Reliability: The ability of the power system to provide customers uninterrupted electric service. Includes generation, transmission, and distribution reliability.

Resource Conservation and Recovery Act (RCRA): Regulates the storage, treatment, and disposal of hazardous and nonhazardous wastes.

Right-of-way (ROW): An easement for a certain purpose over the land of another, such as a strip of land used for a transmission line, roadway, or pipeline.

Rill: A small channel (usually only a few inches deep) eroded into the soil by surface runoff.

Riparian: Of or pertaining to the bank of a river, stream, lake, or other water bodies.

Runoff: The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and may eventually enter streams.

Salininty: A measure of the number of grams of material (salts) dissolved in a number of grams of water. It is often referred to as total dissolved solids (TDS).

Scat: The excrement of an animal.

Scoping: An early, open part of the National Environmental Policy Act (NEPA) process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

Secondary MCL (SMCL): A secondary maximum contaminant level is a nonenforceable federal limit set for contaminants included in the Secondary Drinking Water Standards. It is set to protect the odor, taste, and appearance of drinking water.

Section 106 process: An NHPA (16 U.S.C. §470 et seq.) review process used to identify, evaluate, and protect cultural resources eligible for nomination to the NRHP that may be affected by Federal actions or undertakings.

Sedges: Grasslike plants.

Sediment: Material deposited by wind or water.

Sedimentation: The process of deposition of sediment, especially by mechanical means from a state of suspension in water.

Seismic: Pertaining to any earth vibration, especially an earthquake.

Sensitive species: A plant or animal species listed by the State or Federal government as threatened, endangered, or as a species of special concern.

Silt: A sedimentary material consisting of fine mineral particles intermediate in size between sand and clay.

Socioeconomics: The social and economic condition in the study area.

Soil association: A natural grouping of soil types based on similarities in climatic or physiographic factors and soil parent materials. It may include a number of soil associates provided that they are all present in significant proportions.

Solid waste: In general, solid wastes are nonliquid, nonsoluble discarded materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes include sewage sludge, agricultural refuse, demolition wastes, and mining residues.

Special status species: Special status species include proposed species, listed species, endangered species, and threatened species.

Species of special interest: A species that may have a declining population, limited occurrence, or low numbers for any of a variety of reasons.

State Historic Preservation Officer (SHPO): The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as liaison for purposes of implementing the NHPA.

State Implementation Plan (SIP): A plan developed at the State level and enforceable by the EPA, in which the State explains how it will comply with air quality standards.

Stoichiometry: The process of predicting the amount of product and the amounts of reactants in a chemical reaction, using the balanced equation for the reaction.

Substation: Facility with transformers where voltage on transmission lines changes from one level to another.

Surface water: All bodies of water on the surface of the earth that are open to the atmosphere, such as rivers, lakes, reservoirs, ponds, seas, and estuaries.

Switchyard: Facility with circuit breakers and automatic switches to turn power on and off on different transmission lines.

Tail water: Surface water that drains from the low end of an irrigated field when the amount of water added to the field exceeds the infiltration capacity of the soil.

Tectonic activity: Rock deforming processes and resulting structures that occur over large sections of the lithosphere (the outer solid part of the Earth, including the crust and the uppermost mantle).

Tesla: Unit of measurement of magnetic field.

Threatened species: Any plants or animals that are likely to become endangered species within the foreseeable future throughout all or a significant portion of their ranges and which have been listed as threatened by the USFWS or the National Marine Fisheries Service following the procedures set out in the ESA and its implementing regulations (50 CFR Part 424).

Tile water: Subsurface water that drains via tiles from an irrigated field.

Total dissolved solids (TDS): The concentration of dissolved inorganic chemical constituents (salts) in water.

Total maximum daily load (TMDL): The maximum amount of pollution that a water body can assimilate without violating state water quality standards

Total suspended solids (TSS): A measure of the suspended solids in wastewater, effluent, or water bodies, determined by tests for total suspended nonfilterable solids. Suspended solids are particles of soil, sediment, living material, or dead organisms suspended in water.

Traditional cultural properties: Areas of significance to the beliefs, customs, and practices of a community of people that have been passed down through generations.

Transformer: A device for transferring energy from one circuit to another in an alternating-current system. Its most frequent use in power systems is for changing voltage levels.

Transmission line: The structures, insulators, conductors, and other equipment used to transfer electrical power from one point to another.

Tribe: A Federally recognized American Indian political entity.

Turbine: A device in which a stream of water or gas turns a bladed wheel, converting the kinetic energy of the fluid flow into mechanical energy available from the turbine shaft. Turbines are considered the most economical means of turning large electrical generators. They are typically turned by steam, fuel vapor, water, or wind.

U.S. Environmental Protection Agency (EPA): The independent Federal agency, established in 1970, that regulates Federal environmental matters and oversees the implementation of Federal environmental laws.

Vertebrate: Animals that are members of the subphylum Vertebrata, including the fishes, amphibians, reptiles, birds, and mammals, all of which are characterized by having a segmented bony or cartilaginous spinal column.

Volatile Organic Compounds (VOCs): A broad range of organic compounds that produce vapors at relatively low temperatures, such as gasoline and solvents.

Volt: The unit of voltage or potential difference. It is the electromotive force which, if steadily applied to a circuit having a resistance of one ohm, will produce a current of one ampere.

Voltage: Potential for an electric charge to do work; source of an electric field.

Watershed: The land area that drains into a stream. The geographic region within which water drains into a particular river or body of water.

Watt: The absolute meter-kilogram-second unit of power equal to the work done at the rate of one joule per second or to the power produced by a current of one ampere across a potential difference of one volt.

Wetland: An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

Wilderness Study Area (WSA): An area designated by a Federal land management agency as having wilderness characteristics, thus making it worthy of consideration by Congress for wilderness designation.

Wind rose: A circular diagram showing the percentage of time the wind is from each compass direction for a specific location.

Zero-liquid discharge (technology): A technology that minimizes wastewater production, maximizes reuse, and employs evaporation (solar ponds or mechanical evaporators) to eliminate the remaining wastewater produced.